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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/022,181   | 12/13/2001  | Akira Matsumoto      | 939_035             | 1080             |
| 25191  | 7590        | 10/01/2003           |                     |                  |
| BURR & BROWN<br>PO BOX 7068<br>SYRACUSE, NY 13261-7068 |             |                      | EXAMINER            | KNAUSS, SCOTT A  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2874                |                  |

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                   |                         |
|------------------------------|-----------------------------------|-------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b>            | <b>Applicant(s)</b>     |
|                              | 10/022,181                        | MATSUMOTO ET AL.        |
|                              | <b>Examiner</b><br>Scott A Knauss | <b>Art Unit</b><br>2874 |

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 3 and 4 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The applicant's amendment filed 8/13/03 has been entered and has been carefully considered by the examiner. The previous rejection has been withdrawn, and the following new rejection is applied.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,045,269 (Watanabe et al) in view of JP 05-264844 (Ichiki et al, previously cited by examiner).

Regarding claim 3, Watanabe discloses in figs. 19 and 21 a fiber array comprising bare #4a and jacketed #6a fiber sections, housing an array of bare and

jacketed portions of a plurality of optical fibers of a ribbon shaped optical fiber multi-core line, the bare fiber section comprising v-grooves #22 in a substrate #21, the v-grooves receiving the bare portions of the fibers, the fibers being disposed over the entire lengths of the fiber array.

Watanabe does not, however, disclose the use of second fibers, which transmit no signals, on the outermost sides of the array.

Ichiki, on the other hand, discloses in the abstract the use of fibers #24 which do not transmit signals, and are used to absorb the pressure of a retaining member #26.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the fiber array of Watanabe so that no signals travel through the outermost fibers on the array, for the purpose of using these fibers to absorb pressure from retaining member #23. Such a modification would be particularly advantageous, since it would only require fibers in the array itself to be used as non-transmitting fibers, and would not require the insertion of additional separate fibers into the array, thus simplifying manufacture.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,045,269 (Watanabe et al) in view of Ichiki et al, and further in view of JP 08-114722 (Fukuchi et al, previously cited by examiner)

Watanabe, as modified by Ichiki, discloses all the limitations of claim 4, as set forth above regarding claim 3, but fails to disclose connecting the fiber array to a waveguide chip and sealing the array in a package.

Such a configuration is also well known in the art. One such example is disclosed by Fukuchi in figures 7 and 9, which show a v-grooved substrate holding optical fibers (#1) connected to a waveguide chip #3, and sealed in a package (#6,#8). Such a configuration is used to connect optical fibers to waveguide devices on a substrate, and, in this case, is used to combine a plurality of signals from a plurality of optical fibers into a single output signal.

Therefore it would have been obvious to one of ordinary skill in the art to modify the fiber array of Ichiki by connecting it to a waveguide chip and sealing it in a package as disclosed by Fukuchi in order to connect the optical fibers to waveguide devices on a substrate, and combine a plurality of signals from a plurality of optical fibers into a single output signal.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A Knauss whose telephone number is (703) 305-5043. The examiner can normally be reached on 9-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovemick can be reached on (703) 308 - 4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

Scott Knauss

Art Unit 2874

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HEMANG SANCHAVI  
PRIMARY EXAMINER